

1. A modified antibody or an antigen-binding fragment thereof comprising at least an antigen-binding domain having an antigen-binding affinity and a covalently linked modified human IgG constant domain, wherein said modified human IgG constant domain comprises a substitution with tyrosine at amino acid residue 252, a substitution with threonine at amino acid residue 254, and a substitution with glutamic acid at amino acid residue 256, numbered according to the EU index as in Kabat, and wherein said antigen-binding domain comprises:

- a. a heavy chain CDR1 (HCDR1) comprising the sequence of SEQ ID NO: 1, a heavy chain CDR2 (HCDR2) comprising the sequence of SEQ ID NO: 2, a heavy chain CDR3 (HCDR3) comprising the sequence of SEQ ID NO: 3; a light chain CDR1 (LCDR1) comprising the sequence of SEQ ID NO: 4, a light chain CDR2 (LCDR2) comprising the sequence of SEQ ID NO: 5, and a light chain CDR3 (LCDR3) comprising the sequence of SEQ ID NO: 6;
- b. a HCDR1 comprising the sequence of SEQ ID NO: 11, a HCDR2 comprising the sequence of SEQ ID NO: 12, a HCDR3 comprising the sequence of SEQ ID NO: 13, a LCDR1 comprising the sequence of SEQ ID NO: 14, a LCDR2 comprising the sequence of SEQ ID NO: 15, and a LCDR3 comprising the sequence of SEQ ID NO: 16;
- c. a HCDR1 comprising the sequence of SEQ ID NO: 21, a HCDR2 comprising the sequence of SEQ ID NO: 22, a HCDR3 comprising the sequence of SEQ ID NO: 23, a LCDR1 comprising the sequence of SEQ ID NO: 24, a LCDR2 comprising the sequence of SEQ ID NO: 25, and a LCDR3 comprising the sequence of SEQ ID NO: 26;
- d. a HCDR1 comprising the sequence of SEQ ID NO: 31, a HCDR2 comprising the sequence of SEQ ID NO: 32, a HCDR3 comprising the sequence of SEQ ID NO: 33, a LCDR1 comprising the sequence of SEQ ID NO: 34, a LCDR2 comprising the sequence of SEQ ID NO: 35, and a LCDR3 comprising the sequence of SEQ ID NO: 36;
- e. a HCDR1 comprising the sequence of SEQ ID NO: 41, a HCDR2 comprising the sequence of SEQ ID NO: 42, a HCDR3 comprising the sequence of SEQ ID NO: 43, a LCDR1 comprising the sequence of SEQ ID NO: 44, a LCDR2 comprising the sequence of SEQ ID NO: 45, and a LCDR3 comprising the sequence of SEQ ID NO: 46;
- f. a HCDR1 comprising the sequence of SEQ ID NO: 51, a HCDR2 comprising the sequence of SEQ ID NO: 52, a HCDR3 comprising the sequence of SEQ ID NO: 53, a LCDR1 comprising the sequence of SEQ ID NO: 54, a LCDR2 comprising the sequence of SEQ ID NO: 55, and a LCDR3 comprising the sequence of SEQ ID NO: 56;
- g. a HCDR1 comprising the sequence of SEQ ID NO: 65, a HCDR2 comprising the sequence of SEQ ID NO: 66, a HCDR3 comprising the sequence of SEQ ID NO: 67, a LCDR1 comprising the sequence of SEQ ID NO: 68, a LCDR2 comprising the sequence of SEQ ID NO: 69, and a LCDR3 comprising the sequence of SEQ ID NO: 70;
- h. a HCDR1 comprising the sequence of SEQ ID NO: 75, a HCDR2 comprising the sequence of SEQ ID NO: 76, a HCDR3 comprising the sequence of SEQ ID NO: 77, a LCDR1 comprising the sequence of SEQ ID NO: 78, a LCDR2 comprising the sequence of SEQ ID NO: 79, and a LCDR3 comprising the sequence of SEQ ID NO: 80;
- i. a HCDR1 comprising the sequence of SEQ ID NO: 85, a HCDR2 comprising the sequence of SEQ ID NO: 86, a HCDR3 comprising the sequence of SEQ ID NO: 87, a LCDR1 comprising the sequence of SEQ ID NO: 88, a LCDR2 comprising the sequence of SEQ ID NO: 89, and a LCDR3 comprising the sequence of SEQ ID NO: 90;
- j. a HCDR1 comprising the sequence of SEQ ID NO: 95, a HCDR2 comprising the sequence of SEQ ID NO: 96, a HCDR3 comprising the sequence of SEQ ID NO: 97, a LCDR1 comprising the sequence of SEQ ID NO: 98, a LCDR2 comprising the sequence of SEQ ID NO: 99, and a LCDR3 comprising the sequence of SEQ ID NO: 100;
- k. a HCDR1 comprising the sequence of SEQ ID NO: 105, a HCDR2 comprising the sequence of SEQ ID NO: 106, a HCDR3 comprising the sequence of SEQ ID NO: 107, a LCDR1 comprising the sequence of SEQ ID NO: 108, a LCDR2 comprising the sequence of SEQ ID NO: 109, and a LCDR3 comprising the sequence of SEQ ID NO: 110;
- l. a HCDR1 comprising the sequence of SEQ ID NO: 136, a HCDR2 comprising the sequence of SEQ ID NO: 137, a HCDR3 comprising the sequence of SEQ ID NO: 138, a LCDR1 comprising the sequence of SEQ ID NO: 139, a LCDR2 comprising the sequence of SEQ ID NO: 140, and a LCDR3 comprising the sequence of SEQ ID NO: 141;
- m. HCDR1 comprising the sequence of SEQ ID NO: 146, a HCDR2 comprising the sequence of SEQ ID NO: 147, a HCDR3 comprising the sequence of SEQ ID NO: 148, a LCDR1 comprising the sequence of SEQ ID NO: 149, a LCDR2 comprising the sequence of SEQ ID NO: 150, and a LCDR3 comprising the sequence of SEQ ID NO: 151;
- n. HCDR1 comprising the sequence of SEQ ID NO: 156, a HCDR2 comprising the sequence of SEQ ID NO: 157, a HCDR3 comprising the sequence of SEQ ID NO: 158, a LCDR1 comprising the sequence of SEQ ID NO: 159, a LCDR2 comprising the sequence of SEQ ID NO: 160, and a LCDR3 comprising the sequence of SEQ ID NO: 161;
- o. HCDR1 comprising the sequence of SEQ ID NO: 166, a HCDR2 comprising the sequence of SEQ ID NO: 167, a HCDR3 comprising the sequence of SEQ ID NO: 168, a LCDR1 comprising the sequence of SEQ ID NO: 169, a LCDR2 comprising the sequence of SEQ ID NO: 170, and a LCDR3 comprising the sequence of SEQ ID NO: 171;
- p. HCDR1 comprising the sequence of SEQ ID NO: 176, a HCDR2 comprising the sequence of SEQ ID NO: 177, a HCDR3 comprising the sequence of SEQ ID NO: 178, a LCDR1 comprising the sequence of SEQ ID NO: 179, a LCDR2 comprising the sequence of SEQ ID NO: 180, and a LCDR3 comprising the sequence of SEQ ID NO: 181;
- q. HCDR1 comprising the sequence of SEQ ID NO: 186, a HCDR2 comprising the sequence of SEQ ID NO: 187, a HCDR3 comprising the sequence of SEQ ID NO: 188, a LCDR1 comprising the sequence of SEQ ID NO: 189, a LCDR2 comprising the sequence of SEQ ID NO: 190, and a LCDR3 comprising the sequence of SEQ ID NO: 191;